REMARKS

Reconsideration and allowance of this application are respectfully requested. Claims 2, 8, 14, 21-32, 34-35 and 37-38 are cancelled. Claims 1, 3-7, 9-13, 15-20, 33, 36 and 39-41 remain in this application and, as amended herein, are submitted for the Examiner's reconsideration.

Claims 1, 7, 13, 19, 20, 33, and 36 have been amended to avoid the formal rejections set forth in the Office Action and to place the application in condition for allowance. Because the amendments are intended to clarify the language of the claims and do not change the scope of the claims, no new issues that require further consideration or search are presented. It is therefore submitted that this is Amendment entered.

In the Office Action, the Examiner rejected claims 1, 3-7, 9-13, 15-20, 33, 36, and 39-41 under 35 U.S.C. § 112, first paragraph, as failing to comply with the enablement requirement. Claims 1, 7, 13, 19, 20, 33, and 36 have been amended to better conform to the language of the specification.

The Examiner incorrectly asserts that "Applicant merely teaches first and second frame buffers along with storing to said buffers" and refers to the frame buffer 25. However, the frame buffer 25 is concerned with *reading and writing operations* that are carried out using its frame sub-buffers. Namely, data that was previously written to one of the frame sub-buffers is read concurrent with other data being written to the other frame sub-buffer. Further, the frame sub-buffers are alternately assigned to a buffer used *for displaying pixel data*. By contrast, the phrases "one of the pluralities of first values" and "one of the pluralities of second values" that are set out in the claims refer to values generated by carrying out image rendering and antialiasing, respectively.

Moreover, support for "rendering the three-dimensional image..." defined in the claims is found at, *e.g.*, ¶ [0073] to ¶ [0082] of the specification of which, e.g., ¶ [0080] and ¶ [0082] identify examples of values associated with each pixel after such rendering is carried out.

Additionally, support for "antialiasing only the extracted data..." defined in the claims is found at, *e.g.*, ¶ [0086] to ¶ [0093] and ¶ [0098] to ¶ [0101] of the specification. Examples of values generated by such antialiasing are identified in ¶ [0087].

It is therefore submitted that claims 1, 3-7, 9-13, 15-20, 33, 36, and 39-41 are in compliance with the requirements of 35 U.S.C. § 112, first paragraph.

The Examiner also rejected claims 1, 3-6, 7, 9-13, 15-20, 33, 36, and 39-41 under 35 U.S.C. § 112, second paragraph, as being indefinite. Specifically, the Examiner refers to the phrase "a portion in which aliasing occurs" at line 16 of claim 1, the phrases "antialiasing only the extracted data" and "antialiased image portion" at ll. 17-18 of claim 1, and the phrase "reducing the aliasing" at line 28 of claim 1. The Examiner then asserts that "[u]sage of said different terminologies is unclear as well as inconsistent."

However, the terminology used in the claims would readily be understood by a person of ordinary skill in the relevant art. MPEP §§ 706.03(d) and 2173.02.

Moreover, a description of a rendered image that includes a portion in which aliasing occurs is found at, *e.g.*, ¶ [0004] to ¶ [0006] of the specification, and a description of the relation between the phrases "antialiasing only the extracted data", an "antialiased image portion", "a portion in which aliasing occurs", and "reducing the aliasing" is found at, *e.g.*, ¶¶ [0013] and [0014] of the specification.

It is therefore submitted that claims 1, 3-6, 7, 9-13, 15-20, 33, 36, and 39-41 are in full compliance with the requirements of 35 U.S.C. § 112, second paragraph.

As to the art rejection, claims 1, 3-7, 9-13, 15-20, 33, 36, and 39-41 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Naoi (U.S. Patent No. 6,683,617) in view of Marugame (U.S. Patent No. 5,995,649). Applicants submit that the claims are patentably distinguishable over the cited references.

The Examiner asserts that the Marugame patent teaches an extracting means and that it would have been obvious to one of ordinary skill in the relevant art to incorporate the teachings of Marugame into the Naoi patent. However, a person of ordinary skill in the relevant art would not look to use the sorting/rendering operation described by Naoi and then use Naoi's described antialiasing for only some of the pixels because Naoi's sorting/rendering operation would needlessly create sub-pixel masks for both the pixels that are to be antialiased *and the pixels that are not antialiased*. (*See*, e.g., Figs.1 and 7, col.5 l.63 to col.6 l.2, and col.7, l.60 to col.8 l.6.) Moreover, Naoi's sorting/rendering operation requires four-circuit parallel processing because of the increased apparatus scale and increased processing time (*see* col.7 ll.43-47) so that the generation of sub-pixel masks that are not used is both inefficient and wasteful of valuable processing capability. Therefore, the ordinary practitioner would not look to combine the teachings of Naoi and Marugame in the manner asserted by the Examiner.

Neither Naoi nor Marugame discloses or suggests:

> antialiasing means for antialiasing only the extracted data to form an antialiased image portion associated with the visually important l. part by generating respective pluralities of second values for each pixel in the visually important line part whereby

> a given one of the pluralities of second values is associated with a specific one of the pixels in the visually important line part

as called for in claim 1.

The Examiner also contends that Naoi teaches an antialiasing means and refers to the Abstract and col. 11, lines 40-50, and the Examiner contends that Naoi teaches an overwriting means and refers to block 105 of Fig. 7, namely, the integration/selection circuit. However, Naoi describes a blending circuit that achieves sub-pixel based antialiasing (*see* col.5 l.66 to col.6 l.2, col.8 ll.1-6, and col.11 ll.27-30) and describes the integration/selection circuit as *part of the blending circuit* (*see* Fig.7, and col.8 ll.7-12). Thus, the integration/selection circuit *is part of the circuit that carries out the sub-pixel based antialiasing*. Naoi does not disclose or suggest that the integration/selection circuit carries out *overwriting* using the values generated by an antialiasing means.

Moreover, a person of ordinary skill in the relevant art would not find any teaching or suggestion in Naoi to use the integration/selection circuit for overwriting. Naoi describes that the integration/selection circuit *combines* sub-pixel mask sets that correspond to the same color data to for *integration into a single color data and pixel mask set* and then selects four such color and mask sets. (*See* Fig.9 and col.10 ll.8-12 and 19-32). Thus, the corresponding sub-pixel mask sets *are combined* by the integration/selection circuit. Naoi does not disclose or suggest that the integration/selection circuit *overwrites* by using one of the sub-pixel mask sets *to replace* another sub-pixel mask set.

Neither Naoi nor Marugame discloses or suggests:

> overwriting means for overwriting by using the pluralities of second values associated with each pixel of the visually important line part to replace

> the pluralities of first values associated with each pixel of the visually important line part thereby at least reducing the aliasing of the portion of the rendered image

as recited in claim 1.

It follows that neither Naoi nor Marugame, whether taken alone or in combination, discloses or suggests the image rendering apparatus defined in claim 1. Therefore, claim 1 is patentably distinguish and unobvious over the cited references.

Claims 3-6 depend from claim 1, and each further defines and limits the invention set out in the independent claim. It follows that each of claims 3-6 defines a combination that is patentably distinguishable over the cited references for at least the same reasons.

Independent claim 7 is directed to an image rendering method that includes limitations similar to those set out in claim 1. It follows that claim 7 is patentably distinguishable over Naoi and Marugame at least for the reasons set out above regarding claim 1.

Claims 9-12 depend from claim 7 and are therefore each distinguishable over the cited references for at least the same reasons.

Independent claim 13 is directed to a computer-readable storage medium having a computer program stored therein for operating an apparatus to perform the image rendering method defined in claim 7. Claim 13 is therefore patentably distinguishable over Naoi and Marugame for at least the same reasons.

Claims 15-18 depend from claim 13 and are distinguishable over the cited art at least for the same reasons.

Independent claim 19 relates to a server apparatus that includes a computer-readable storage medium similar to that

defined in claim 13. Therefore, at least for the same reasons, claim 19 is patentably distinguishable over the Naoi and Marugame references.

Claim 20 defines a computer-readable storage medium having limitations similar to those set out in claim 13 and is patentably distinguishable over Naoi and Marugame at least for the same reasons.

Claim 39 depends from claim 20 and is distinguishable over the cited art at least for the same reasons.

Independent claim 33 calls for an image rendering apparatus having limitations similar to those set out in claim 1. Claim 33 is therefore patentably distinguishable over the Naoi and Marugame patents at least for the same reasons.

Claim 40 depends from claim 33 and is distinguishable over the cited references for at least the same reasons.

Independent claim 36 defines an image rendering method having limitations similar to those set out in claim 7. It follows that claim 36 is patentably distinguishable over Naoi and Marugame at least for the same reasons.

Claim 41 depends from claim 36 and is distinguishable over Naoi and Marugame for at least the same reasons.

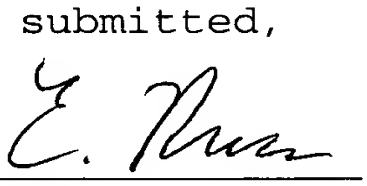
Accordingly, the withdrawal of the rejection under 35 U.S.C. § 103 is respectfully requested.

In view of the above, each of the presently pending claims in this application is believed to be in immediate condition for allowance. Accordingly, the Examiner is respectfully requested to withdraw the outstanding rejection of the claims and to pass this application to issue. If, however, for any reason the Examiner does not believe that such action can be taken at this time, it is respectfully requested that the Examiner telephone applicants' attorney at (908) 654-5000 in order to overcome any additional objections which the Examiner might have.

If there are any additional charges in connection with this requested amendment, the Examiner is authorized to charge Deposit Account No. 12-1095 therefor.

Dated: May 2, 2006

Respectfully submitted,

By 

Lawrence E. Russ
Registration No.: 35,342
LERNER, DAVID, LITTENBERG,
KRUMHOLZ & MENTLIK, LLP
600 South Avenue West
Westfield, New Jersey 07090
(908) 654-5000
Attorney for Applicant

652063_1.DOC